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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/267,199

DATE: 03/30/1999
TIME: 10:01:28

Input Set: I267199.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

1 <110> APPLICANT: Bhat, Barkur G.
2 Boddupalli, Sekhar S.
3 Kishore, Ganesh M.
4 Liu, Jingdong
5 Rangwala, Shaikat H.
6 Venkatramesh, Mylavaram
7 <120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated Wit
8 Tocopherol Pathway
9 <130> FILE REFERENCE: 38-21(15092)B
10 <140> CURRENT APPLICATION NUMBER: US/09/267,199
11 <141> CURRENT FILING DATE: 1999-03-12
12 <150> EARLIER APPLICATION NUMBER: US 60/078,031
13 <151> EARLIER FILING DATE: 1998-03-16
14 <160> NUMBER OF SEQ ID NOS: 627
15 <210> SEQ ID NO 1
16 <211> LENGTH: 252
17 <212> TYPE: DNA
18 <213> ORGANISM: Zea mays
19 <400> SEQUENCE: 1
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21 gctcatgttc ggaggccaga tgcctgtcgt caaggtggga agaattggcag gtcagtttgc 120
22 gaaccaaggt cagatgggtt tgaggagcgg gatggattga agttgccaag ctatagaggg 180
23 gacaatatca atggggatgc attcaatggg gagtcaaggt tgccagatcc acaccgcatg 240
24 ataagggcgt ac 252
25 <210> SEQ ID NO 2
26 <211> LENGTH: 123
27 <212> TYPE: DNA
28 <213> ORGANISM: Zea mays
29 <400> SEQUENCE: 2
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31 ttgtggcctg aagacgcgct catttgactc cattctggct gaagtgcgtg cctgcttcga 120
32 tgt 123
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34 <211> LENGTH: 287
35 <212> TYPE: DNA
36 <213> ORGANISM: Zea mays
37 <400> SEQUENCE: 3
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39 gctgaacgcg tcccagtcct tggagctcgc cttcatactc gccgagaagc ttaggaagcg 120
40 gaggatgcgg cggctcgtcg tggcgtctgg gctcggcggc agcatcttgc ccttgccgcc 180
41 ctttggttt tgatgtcttg cacgctggct gtgtgcatgc aggggtgcagt gcaggggtgt 240
42 ggtaggagaa tcttacgttg tcgtttgcct tgctatgtag tatgtaa 287
43 <210> SEQ ID NO 4
44 <211> LENGTH: 268

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50      cctcgtcgcc tttgtacacg aaccagctgg gttccattcc atcaatgggt caaaaagcac   180
51      aactaggttc actgtcaagg actagtcctt gggttttgtt tcagctgctg tgtcaaactt   240
52      tgctggcatg cactggtaaa ctagatag                                     268
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60      gcactcgtca actcgtatga gcgcatgttg aattccttcg tgggtgtgcc aatcctcttg   180
61      gcataaaggt gagcgacaaa atgaacccca gtgacttggg gaagctgatt gagattctga   240
62      acccttcaaa caaacctgga aggatcacca taattacaag gatgggggca gagaacatga   300
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71      ggtgagcgac aaaatgaacc ccagtgaagt ggtgaagctg attgatattc tgaacccttc   180
72      aaacaaacct ggaaggatca ccataattac aaggatgggg gcagagaaca tgagggtgaa   240
73      gttgcctcat ctcacccgtg ctgttcgcaa tgctggactg attgtcacat ggattactg   299
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75 <211> LENGTH: 269
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80      cctcttggca taaaggtgag cgacaaaatg aacccagtg acttggtgaa gctgattgag   120
81      attctgaacc cttcaaaca accctggaagg atcaccataa ttacaaggat gggggcagag   180
82      aacatggagt gaagttgcct catctcatcc gtgctgttcg caatgctgga ttaattgtca   240
83      catggattac tgatcctatg catggaaac                                     269
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87 <213> ORGANISM: Zea mays
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90      cttctcttac cctacgagca gtctcttacc cgtaaagact ccaccagtgg ctttttctac   120
91      gattgttcgg ccacatgct gtgggttggt gagcgactc gtcaactcga tggagcgcat   180
92      gttgaattcc ttcgtggtgt tgccaatcct cttggcataa agtgagcgac aaaatgaacc   240
93      ccagtgaatt ggtgaagctg attgagattc tgaacccttc taacaaacct ggaaggatca   300
94      ccataattac                                     310

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102      gccacatgt tgtgggttg tgagcgact cgacaactcg atggagctca tgttgaattc      180
103      ctccgtggtg ttgccaacc tctgggcata aaggtgagcg acaaaatgaa cccagtgag      240
104      ttggtgaagc tgattgatat tctgaaccct tcaaacaaac ctggaaggat ca      292
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106  <211> LENGTH: 332
107  <212> TYPE: DNA
108  <213> ORGANISM: Zea mays
109  <400> SEQUENCE: 10
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111      cttggcataa aggtgagcga caaaatgaac cccagtgact tgggtgaagct gattgagatt      120
112      ctgaaccctt caaacaacc tggaaggatc accataatta caaggatggg ggcagagaac      180
113      atgagagtga agttgcctca tctcatccgt gctgttcgca atgctggatt aattgtcaca      240
114      tggattactg atcctatgca tggaaacacc atcaaggcgc cttgtggcct gaagactcgt      300
115      ccattcgact caattctggc tgaagtgcgc gc      332
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122      cctcttggca taaaggtgag cgacaaaatg aacccagtg acttggtgaa gctgattgag      120
123      attctgaacc cttcaaaca acctggaagg atcaccataa ttacaaggat gggggcagag      180
124      aacatgagag tgaagttgcc tcatctcatc cgtgctgttc gcaatgctgg attaattgtc      240
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130  <400> SEQUENCE: 12
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132      ttccagcagt ggccttttct atgattgttc ggcccagatg ttgtgggttg gtgagcgcac      120
133      tcgacaactc gatggagctc atgttgaatt cctccgttgt gttgccaagc ctctgggcat      180
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150 <213> ORGANISM: Zea mays
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154 tgaagctgat tgatattctg aacccttcaa acaaacctgg aaggatcacc ataattacaa 180
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173 tacgagcagt ctcttaccgg taaagactcc accagtggcc ttttctacga ttgttcggcc 180
174 cacatgttgt gggttggtga gcgcactcgt caactcgatg gagcgcatgt tgaattcctc 240
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184 aaggccccct gtggcctgaa gactcgtcca tttgactcca ttctggctga agtgcgtgcc 180
185 ttcttcgatg tgcattgacca agaaggaagc caccctgggg gcgtccacct tgaaatgact 240
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190 <213> ORGANISM: Zea mays
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194 cttgaaatga ctgggcagaa cgtgaccgag tgcattggtg gatcacggac tgtgaccttc 180

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DATE: 03/30/1999
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204      accacccgat aatgacgact actgacttct ggacctcgca cgagtgcctt ctcttaccct 180
205      acgagcaggc tcttaccctg gaggattcca ccagtggcct tttctatgat tgttcggccc 240
206      acatgtttgtg ggttggtgag cgcactcgac aactcgatgg agctcatgtt gaattcctcc 300
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215      accagtggcc ttttctacga ttgttcggcc cacatgttgt gggttggtga gcgcactcgt 180
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217      gtgagcgaca aaatgaaccc cagt 265
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.



Input Set: I267199.RAW

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740	W "N" or "Xaa" used: Feature required	gtttataaat tctcatgntt ccgacccttg catgctat
826	W "N" or "Xaa" used: Feature required	cggtaatgtt gacttctggc cgcctagtcc gaagcagg
827	W "N" or "Xaa" used: Feature required	ctagttgnaa tcctccgtgg tgttgccaac cctctggg
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937	W "N" or "Xaa" used: Feature required	gggctcaaca gcagcctgcc actgccnca ctggcttt
1196	W "N" or "Xaa" used: Feature required	attccggatc cgcataggat gatnagggt tatcgcca
1215	W "N" or "Xaa" used: Feature required	ctccctcatt cccaccaaatt ctctantccc ccaatccc
1216	W "N" or "Xaa" used: Feature required	gcccgcctc cgcccaagc ccggcccatc acctcca
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1312	W "N" or "Xaa" used: Feature required	tnntntgat caataagggc tgagctgagg gcnttnnn
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1425	W "N" or "Xaa" used: Feature required	gctccatgng gtcttaaaac ttcgcccctt cgattcat
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1487	W "N" or "Xaa" used: Feature required	cttctttccc ccaatngt
1573	W "N" or "Xaa" used: Feature required	cccaggtcga agatactggt ttccnaacca gcctgaca
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1852	W "N" or "Xaa" used: Feature required	aatgacgat gtaagggttt ctctggaaga gattgcat
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2003	W "N" or "Xaa" used: Feature required	ttgacancan ctgtggttgc tgcagggtga aatgcaag
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2054	W "N" or "Xaa" used: Feature required	ctgatttctg ttccatatgt tganatgact ctgaagtt
2067	W "N" or "Xaa" used: Feature required	gaaattgaga ttgttgataa actgatttct gttccata
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2069	W "N" or "Xaa" used: Feature required	ggaggtcana agtacaagtc tcctggnaat gcttttgt
2070	W "N" or "Xaa" used: Feature required	agttatttac tancgtgtgc agcaantact gnnngggac
2071	W "N" or "Xaa" used: Feature required	acaaacagtt tacagggaga tgtaaaattt gcngnagt
2416	W "N" or "Xaa" used: Feature required	ggggtcgtca catgcattgc angaaatgtt cctcgtgg
2449	W "N" or "Xaa" used: Feature required	ttctcttcca atggcgtctt ctctttccac ccaacctt
2483	W "N" or "Xaa" used: Feature required	gatcttctgc aagagaaaca attggnaggg ttgcttct

Input Set: I267199.RAW

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2580	W "N" or "Xaa" used: Feature required	tactgagatg gcagtagctt ataggccttc ccatgcag
2609	W "N" or "Xaa" used: Feature required	atggagaatc acatggagga ggtgttggtt gtattatt
2610	W "N" or "Xaa" used: Feature required	ctctctccga agctgatatg caattggatc ttgacaga
2619	W "N" or "Xaa" used: Feature required	ctctttccac caaaccattc acaccgncg ctctctcc
2641	W "N" or "Xaa" used: Feature required	tctaattctc ccatttctct tccaatggcg tcttctct
2645	W "N" or "Xaa" used: Feature required	tgtgttattg atggagtctc ctgccttct tctctctg
2684	W "N" or "Xaa" used: Feature required	agatactgtg agtgtttttn ttctcaatc aatctaata
2835	W "N" or "Xaa" used: Feature required	aggggnnnna aatttagctg atatacttgc atgtctgt
3101	W "N" or "Xaa" used: Feature required	cttgccaca ttgcccctgg gttgaccata ngatcact
3162	W "N" or "Xaa" used: Feature required	ggcgtatgctt gctgcctctg gtgcaaacat cnttccaa
3225	W "N" or "Xaa" used: Feature required	tgnngagatc acccanaagt cttacccta tctggctt
3228	W "N" or "Xaa" used: Feature required	accatcgaa agtggaaca gattaggcag ctgatgag
3229	W "N" or "Xaa" used: Feature required	tttgacagtg cctatcaagg ctttgcaagt cggagtct
3304	W "N" or "Xaa" used: Feature required	gaccacnagt ggtccaccga ttggactctg gacntgaa
3305	W "N" or "Xaa" used: Feature required	aacatgaggc aacaactatt tatgcgtga atccagag
3626	W "N" or "Xaa" used: Feature required	tgcaaggcac tatcacgagc gcaactatc catccac
3706	W "N" or "Xaa" used: Feature required	cagacaccac cgcacctcc ancctcgaat cgttcccc
3795	W "N" or "Xaa" used: Feature required	agctgcttta gcgtactaac tcgnaatcga ctgcacag
3796	W "N" or "Xaa" used: Feature required	actctcgaat cgttcccacc atggcgctgc agcngatc
3797	W "N" or "Xaa" used: Feature required	cgagcgaggc actcgggagg gacncgatg cctccgga
3798	W "N" or "Xaa" used: Feature required	gacataagga tccccagct cccagtana ngggtcaa
3799	W "N" or "Xaa" used: Feature required	acgtcggacc gaggggaaggg aagctcctag tgctgaac
3821	W "N" or "Xaa" used: Feature required	atcctccgtc ttcccgccac tcgagcaggc cccggagg
3840	W "N" or "Xaa" used: Feature required	ctcgaatcgt tcnccaccat ggcgtcgcag ggatcctc
3841	W "N" or "Xaa" used: Feature required	gcaccggagg actccatcct cggagtgacc gttgccta
4137	W "N" or "Xaa" used: Feature required	cttttctcgg atggacatcc agttgctana gatttcaa
4155	W "N" or "Xaa" used: Feature required	gctccttcag gttcaattgt actgctgna tgctgtg
4171	W "N" or "Xaa" used: Feature required	gatangatca ttaacatgag gcaacaacta tttaatgc
4204	W "N" or "Xaa" used: Feature required	ccagangaac ccttggtg
4212	W "N" or "Xaa" used: Feature required	tttgganatc acccaaaagt cttacccta tctggctt
4245	W "N" or "Xaa" used: Feature required	cgaacttctc atggctcaga gctacgctaa gancatgg
4246	W "N" or "Xaa" used: Feature required	cgctttgagc attgtatgtn aaagtgccga tgtagctg
4249	W "N" or "Xaa" used: Feature required	taggncttta acatgaggca acaactattt aatgcgct
4317	W "N" or "Xaa" used: Feature required	tttgagcatt gtatgtaaaa gtgccgatnt agctgtta
4318	W "N" or "Xaa" used: Feature required	tgtcancagg cctatgtatt caaacctcc tcttcagt
4319	W "N" or "Xaa" used: Feature required	annncaggac agcgagatgt tcaacgaatg gactctgg
4388	W "N" or "Xaa" used: Feature required	cggaaacgctg gttntaatgc gctgaaatcc agaggaac
4389	W "N" or "Xaa" used: Feature required	aanaagcaaa ttgggatgtt tactttcact gggctgaa
4439	W "N" or "Xaa" used: Feature required	tggggaaatc acccaaaagt cttacccta tctggctt
4636	W "N" or "Xaa" used: Feature required	gccagctgaa acgattggca cgtcccatgt nttcgaa
4637	W "N" or "Xaa" used: Feature required	nggttggnaa cnttggtggt gatgcaacca ntgtttgg
4638	W "N" or "Xaa" used: Feature required	tctaantgct tgancganc naagatngta ananaaaa
4639	W "N" or "Xaa" used: Feature required	aaaggncaaa aaccgcaaga actgggnttt tatttnna
4640	W "N" or "Xaa" used: Feature required	anacggnttt aaaaaaannc antgggnaac attgcggn
4641	W "N" or "Xaa" used: Feature required	angnnngggg gatttgnaaa natgggntnt cctggggt
4662	W "N" or "Xaa" used: Feature required	gctagcagcc gcctcctcgt caggccnttt ttnttca
4663	W "N" or "Xaa" used: Feature required	nggtccgaac tccgtctgct tcatctgagc gtccggga

Input Set: I267199.RAW

Line	Error/Warning	Original Text
4665	W "N" or "Xaa" used: Feature required	cgctgcggcc gtccaaaacc atggccatca cccgatnag
4666	W "N" or "Xaa" used: Feature required	gcgtgccggt tateggtcta gccgcggggg agccagac
4667	W "N" or "Xaa" used: Feature required	gnngangccc ggattgatgc aattaggaat gggtatac
4668	W "N" or "Xaa" used: Feature required	gacttttgaa ctgangaang ggtattnta ctaaaact
4669	W "N" or "Xaa" used: Feature required	taacttccaa atnaaggtct tngtaacaan ggaactaa
4736	W "N" or "Xaa" used: Feature required	gtncgcagtt taggaacggt agcctgtcag tacgcgtc
4781	W "N" or "Xaa" used: Feature required	taagcttatac tttggcgctg acagccctgc tattcagg
4795	W "N" or "Xaa" used: Feature required	agcgctaagc ttatctttgg cgctgacagc cctgctat
4864	W "N" or "Xaa" used: Feature required	tgagggtgga gagtgaattg aannttccca gtctcnca
4916	W "N" or "Xaa" used: Feature required	ggggggntaa agggggantt tattggaacc ccaattcc
4917	W "N" or "Xaa" used: Feature required	gcaacatgca gccttcactt cgaaggactc ctggaaga
4918	W "N" or "Xaa" used: Feature required	tcaatngtac tgctgcatgc ctgtgctcac aaccctac
4922	W "N" or "Xaa" used: Feature required	ggagagcgtg ttggcgctt gagcattgna tgtaaaag
4923	W "N" or "Xaa" used: Feature required	gaaagtcaac tcaaacttgn catcaggcct atgtattc
4924	W "N" or "Xaa" used: Feature required	tctatcgntg ctacat
4948	W "N" or "Xaa" used: Feature required	tggctgatag gatcattaac atgangcaac aactattt
4949	W "N" or "Xaa" used: Feature required	accctgggtg attggagcca tatcattaaa gcaaattg
4950	W "N" or "Xaa" used: Feature required	cngaaataa cgaagcnnng tcggccnntt cangaggg
4983	W "N" or "Xaa" used: Feature required	ttggcgctt gagcattgta ngtaanagt cccgatga
4984	W "N" or "Xaa" used: Feature required	tcaancttgt catcaggcnn atgtattcaa accctcct
4985	W "N" or "Xaa" used: Feature required	ctaccatnct caggacagc gagatgttca nccaatgg
4986	W "N" or "Xaa" used: Feature required	ctgataggat cattaacang aggcaacaac tatttaat
4987	W "N" or "Xaa" used: Feature required	ctgggtgantg gagccatntc ngttaagnca aattggga
4988	W "N" or "Xaa" used: Feature required	naagtaagcg aaacagnntn cgncccttcc cggngggc
5020	W "N" or "Xaa" used: Feature required	acaaaganaa taccgacatt at
5087	W "N" or "Xaa" used: Feature required	gccgaaaggn ttggngcaat caatgtggtt tcatcatc
5088	W "N" or "Xaa" used: Feature required	nanagtcagt tgtaaggatt gcccgaccan gtactcta
5089	W "N" or "Xaa" used: Feature required	agtngcgtgt gttggaanca gtccttatga tgaagnga
5090	W "N" or "Xaa" used: Feature required	tagcacgtat agtattattc aagacanag
5165	W "N" or "Xaa" used: Feature required	cggggctagg atagtngccg atgttggttg aaaccag
5239	W "N" or "Xaa" used: Feature required	aagttgcnng atgaaaataa ttgacacaaa tcttcagt
5257	W "N" or "Xaa" used: Feature required	attaagcaac attttactgn tgtatataag tggagagt
5302	W "N" or "Xaa" used: Feature required	cccttttccc cataagatca atcttggnaa aggtactt
5336	W "N" or "Xaa" used: Feature required	taagatcaaa agctttgtta ctttctttga cagtgcct
5345	W "N" or "Xaa" used: Feature required	attgttttgc tacatgcatg cgcacataac nacactgg
5368	W "N" or "Xaa" used: Feature required	acccactgg tgtggatcca acccttgagc aatgggag
5379	W "N" or "Xaa" used: Feature required	gcggactata tacttgccaa caccaacttg gggcaatc
5382	W "N" or "Xaa" used: Feature required	gcacataacc ccactggtgt ggatccaacc cttgagca
5383	W "N" or "Xaa" used: Feature required	ataagatcaa aagctttgtt actttctttg acagnct
5447	W "N" or "Xaa" used: Feature required	aaagaatctg ggtctttatg gggaacngt tggcgctt
5458	W "N" or "Xaa" used: Feature required	aagctttgnt acctttcttt gacagtgcnn atcagggg
5459	W "N" or "Xaa" used: Feature required	gcngatggcc caacctgttc gtttgtntgt tgntgatg
5460	W "N" or "Xaa" used: Feature required	aagctatgcn aagaatctgg gtcttnatgg ggaacgtg
5461	W "N" or "Xaa" used: Feature required	caagtcancat gatgttgcaa gcaggggtga gagccagc
5551	W "N" or "Xaa" used: Feature required	acgcacaagg ganagcccat gcttgagggc aacacttt
5602	W "N" or "Xaa" used: Feature required	ctacaacaca cttttttaag tgattcggtc gcagaaac
5603	W "N" or "Xaa" used: Feature required	cagcttcgca cgctgtctca nctcttggtc tctgtcca
5606	W "N" or "Xaa" used: Feature required	gcnc
5624	W "N" or "Xaa" used: Feature required	tgccgaattc cgctcgagct cgagccggtt tccntcat
5646	W "N" or "Xaa" used: Feature required	tgttctgttc tgnctgna catctcgtna atcgnnta

Input Set: I267199.RAW

Line ? Error/Warning

Original Text

Line	Error/Warning	Original Text
5647	W "N" or "Xaa" used: Feature required	tgcagctggg cttctncgtt tatntaccgc agcttngc
5648	W "N" or "Xaa" used: Feature required	tctgtnnacc angcacaagg gaaagcacat gcttggag
5649	W "N" or "Xaa" used: Feature required	aggncccaat tccttctcta gttcaaggtc tagaggtc
5650	W "N" or "Xaa" used: Feature required	taatgtatct cggtttgaag gcatacctat ng
5668	W "N" or "Xaa" used: Feature required	agaaacatgg cttcgtcggg tctctccgca gcttcgca
5669	W "N" or "Xaa" used: Feature required	nctgtncacc acgcacaagg gnaagcccat gantagag
5670	W "N" or "Xaa" used: Feature required	aggaccaat tccttctcna gttcaaggtn tagaggtc
5671	W "N" or "Xaa" used: Feature required	taacgnttct cgggttngag gcatacctat gggcgcct
5672	W "N" or "Xaa" used: Feature required	tttctgaggn atntaagggtg gaccaatagt ggtgtnc
5740	W "N" or "Xaa" used: Feature required	cttgggagtt ggggcataca gaacagaaga actacagc
5820	W "N" or "Xaa" used: Feature required	ctgtgatcgc agactcaaca ctctcgctag acanttcc
5821	W "N" or "Xaa" used: Feature required	cagcatctcc gcttctccaa cctccgcttc tgattccg
5822	W "N" or "Xaa" used: Feature required	tccgaagat cctatcctcg gggtaactnt ngcttata
5833	W "N" or "Xaa" used: Feature required	gaatgtagt angcgagttg aacagcaact cataaatg
5893	W "N" or "Xaa" used: Feature required	accaccctgt gatngcagac tcaacactct cgctagac
5894	W "N" or "Xaa" used: Feature required	tcangacagc atctccgctt ctncacactc cgcntctg
5895	W "N" or "Xaa" used: Feature required	nngnnctcnc naanaccta tncctggggg aactnnag
5914	W "N" or "Xaa" used: Feature required	gttcatcgca gactcaacac tctctccaga cacttcc
6007	W "N" or "Xaa" used: Feature required	atccaagtcc agttaanctc aacttgggan ttggtgtt
6008	W "N" or "Xaa" used: Feature required	ctcttggttt gaatgtagt aggcgagttg agcagcaa
6009	W "N" or "Xaa" used: Feature required	acaagnattt nccncgtggg gggg
6066	W "N" or "Xaa" used: Feature required	gcaaagcacc ccaggntcnt ggttntctcc gatgaaat
6067	W "N" or "Xaa" used: Feature required	ccagcaactg cacacaagtt ttgcatcttt accaggan
6068	W "N" or "Xaa" used: Feature required	gaatggattt tccaaggcct ttgcaatgan tggttggc
6118	W "N" or "Xaa" used: Feature required	agaatgattc gcttaatcac gagtacctcc ccgtgttg
6119	W "N" or "Xaa" used: Feature required	ctgctgtcac tcttttgctc ggtgacgtcg agacttcc
6120	W "N" or "Xaa" used: Feature required	ctttnggagt gcaaacactg ngtggtatgg agcatang
6121	W "N" or "Xaa" used: Feature required	aattcncata nannanattt
6155	W "N" or "Xaa" used: Feature required	gaggaaggaa aacctcttgt ttttgatgta gtgaggcg
6171	W "N" or "Xaa" used: Feature required	ctgcagtgca tgctntatct gngactgggt catgt
6254	W "N" or "Xaa" used: Feature required	ccactgttca atgctngtct ggaactgggt ctttaaga
6280	W "N" or "Xaa" used: Feature required	tgctcgcttac aacaaagatc cangtccagt taagctca
6295	W "N" or "Xaa" used: Feature required	tgacgtgtca cgcaacangg aatatattcc gattgttg
6346	W "N" or "Xaa" used: Feature required	ttgttgacag anatgatcag ggcactctgc ttcagatt
6347	W "N" or "Xaa" used: Feature required	ggccantcga tattcataga gataattcag aggatcgg
6348	W "N" or "Xaa" used: Feature required	gggaagggtg acatccangg tncatgtggg ggttttgg
6416	W "N" or "Xaa" used: Feature required	cgacgcgcnc acctgccttg ccttcgctgc caaacacg
6425	W "N" or "Xaa" used: Feature required	gacntggctg tccggcgccc attttcagct ccttgatc
6426	W "N" or "Xaa" used: Feature required	nntggcttcg ccgagggtt tcctttcccc gacagcat
6550	W "N" or "Xaa" used: Feature required	gngatttaag aagttcaatt ctttactcaa actttgtg